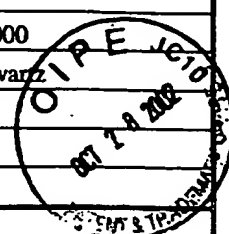


Substitute for Form 1449A/PTO (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
		Application Number		09/704,991	
		Filing Date		November 2, 2000	
		First Named Inventor:		Edward L. Schwarz	
		Group Art Unit		2621	
		Examiner Name		Unknown	
Sheet 1 of 5		Attorney Docket Number		74451.P042X2	



U.S. PATENT DOCUMENTS						
Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
JW	A	4985927		Norwood et al.	01/15/1991	
JW	B	4987480		Lipmann et al.	01/22/1991	
JW	C	5000183		Bonnefous	03/19/1991	
JW	D	5001764		Wood et al.	03/19/1991	
JW	E	5014134		Lawton et al.	05/07/1991	
JW	F	5018210		Merryman et al.	05/21/1991	
JW	G	5068911		Resnikoff et al.	11/26/1991	
JW	H	5073964		Resnikoff	12/17/1991	
JW	I	5095447		Manns et al.	03/10/1992	
JW	J	5101446		Resnikoff et al.	03/31/1992	
JW	K	5103306		Weiman et al.	04/07/1992	
JW	L	5121191		Cassereau et al.	06/09/1992	
JW	M	5124930		Nicolas et al.	06/23/1992	
JW	N	5128757		Citta et al.	07/07/1992	
JW	O	5148498		Resnikoff et al.	09/15/1992	
JW	P	5152953		Ackerman	10/06/1992	
JW	Q	5156943		Whitney	10/20/1992	
JW	R	5173880		Duren et al.	12/22/1992	
JW	S	5420891		Akansu	05/30/1995	
JW	T	3580655		Leith et al.	05/25/1971	

RECEIVED
 OCT 9 1 2002
 Technology Center 2600

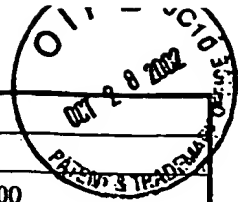
FOREIGN PATENT DOCUMENTS								
Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (If known)				
JW	U	WO	9423385			10/13/1994		
JW	V	EP	0622741			03/30/1994		
JW	W	UK	2284121			05/24/1995		
JW	X	WO	9609718			03/28/1996		
JW	Y	WO	9519683			07/20/1995		
JW	Z	EP	0701375			03/13/1996		
JW	AA	UK	2211691			07/05/1989		

Examiner Signature		Date Considered	4/12/05
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Substitute for Form 1449A/PTO (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known		
				Application Number	09/704,991	
				Filing Date	November 2, 2000	
				First Named Inventor:	Edward L. Schwartz	
				Group Art Unit	2621	
				Examiner Name	Unknown	
Sheet	2	of	5	Attorney Docket Number		74451.P042X2

U.S. PATENT DOCUMENTS						
Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
JW	BB	3950103		Schmidt-Weinmar	04/13/1976	
JW	CC	4136954		Jamieson	01/30/1979	
JW	DD	4223354		Noble et al.	09/16/1980	
JW	EE	4599567		Goupillaud et al.	07/08/1986	
JW	FF	4663660		Fedele et al.	05/05/1987	
JW	GG	4701006		Perlmutter	10/20/1987	
JW	HH	4760563		Beylkin	07/26/1988	
JW	II	4785349		Keith et al.	11/15/1988	
JW	JJ	4805129		David	02/14/1989	
JW	KK	4817182		Adelson et al.	03/28/1989	
JW	LL	4821223		David	04/11/1989	
JW	MM	4827336		Acampora et al.	05/02/1989	
JW	NN	4829378		LeGall	05/09/1989	
JW	OO	4837517		Barber	06/06/1989	
JW	PP	4864398		Avis et al.	09/05/1989	
JW	QQ	4897717		Hamilton et al.	01/30/1990	
JW	RR	4904073		Lawton et al.	02/27/1990	
JW	SS	4929223		Walsh	05/29/1990	
JW	TT	4936665		Whitney	06/26/1990	
JW	UU	4974187		Lawton	11/27/1990	
JW	VV	4982283		Acampora	1/1/1991	

RECEIVED
OCT 31 2002
Technology Center 2600

FOREIGN PATENT DOCUMENTS								
Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴ Code ⁵	Kind				
				(If known)				
JW	WW	EP	0593013			04/20/1994		
JW	XX	EP	0510933			10/28/1992		
JW	YY	WO	8810049			12/15/1988		
?								

Examiner Signature		Date Considered	4/12/05
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for Form 1449A/PTO (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	09/704,991
				Filing Date	November 2, 2000
				First Named Inventor:	Edward L. Schwartz
				Group Art Unit	2621
				Examiner Name	Unknown
				Attorney Docket Number	74451.P042X2
Sheet	3	of	5		

U.S. PATENT DOCUMENTS						
Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
SW	ZZ	4393456		Marshall, Jr.	07/12/1983	
SW	AAA	4569075		Nussbaumer	02/14/1986	
SW	BBB	4652881		Lewis	03/24/1987	
SW	CCC	4674125		Carlson et al.	06/16/1987	
SW	DDD	4785348		Fonsalas et al.	11/15/1988	
SW	EEE	4799179		Masson et al.	01/17/1989	
SW	FFF	4815023		Arbeiter	03/21/1989	
SW	GGG	4839889		Gockler	06/13/1989	
SW	HHH	4868868		Yazu et al.	09/19/1989	
SW	III	4918524		Ansari et al.	04/17/1990	
SW	JJJ	5049992		Citta et al.	09/17/1990	
SW	KKK	5072308		Lin et al.	12/10/1991	
SW	LLL	5097331		Chen et al.	03/17/1992	
SW	MMM	5101280		Moronaga et al.	03/31/1992	
SW	NNN	5128791		LeGall et al.	07/07/1992	
SW	OOO	5182645		Breeuwer et al.	01/26/1993	
SW	PPP	5315670		Shapiro	05/24/1994	
SW	QQQ	5321776		Shapiro	06/14/1994	
SW	RRR	5412741		Shapiro	05/02/1995	
SW	SSS	4155097		Lux	05/15/1979	

[illegible]

Examiner Signature		Date Considered	6/12/05
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[illegible][illegible]

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute for Form 1449/APTO (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	09/704,991
				Filing Date	November 2, 2000
				First Named Inventor:	Edward L. Schwartz
				Group Art Unit	2621
				Examiner Name	Unknown
Sheet	5	of	5	Attorney Docket Number	74451.P042X2
OTHER ART - NO PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
Jw	WWW	1977 IEEE International Conference on Acoustics Speech & Signal Processing, "Application of Quadrature Mirror Filters to Split Band Voice Coding Schemes", D. Esteban and C. Galand, pp. 191-195.			
Jw	XXX	Martin Vetterli, "Filter Banks Allowing Perfect Reconstruction", <u>Signal Processing</u> 10, (1986), pp. 219-244.			
Jw	YYY	R.E. Crochiere, S.A. Webber, J.L. Flanagan, "Digital Coding of Speech in Sub-bands", 1976, American Telephone and Telegraph Company, The Bell System Technical Journal, Vol. 55, No. 8, October 1976, pp. 1069-1085.			
Jw	ZZZ	John W. Woods and Sean D. O'Neil, "Sub-band Coding of Images", <u>Proceedings ICASSP 86</u> , Tokyo, Japan, April 1986, pp. 1005-1008.			
Jw	AAAA	"Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6, 7, 8, 9, 1987, Volume 3 of 4, "Sub-band coding of Images Using Predictive Vector Quantization", P.H. Westernick, J. Biernond and D.E. Boekee, pp. 1378 - 1381.			
Jw	BBBB	Mark J.T. Smith and Thomas P. Barnwell, III, "Exact Reconstruction Techniques for Tree-Structured Subband Coders", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol. ASSP-34, No. 3, June 1986, p. 434-441.			
Jw	CCCC	Marvin Vetterli, "Multi-Dimensional Sub-band coding: Some Theory and Algorithms", <u>Signal Processing</u> 6 (1984), pp. 97-112.			
Jw	DDDD	H. Gharavi and Ali Tabatabai, "Sub-band coding of Digital Images Using Two-Dimensional Quadrature Mirror Filtering", <u>SPIE Vol. 707 Visual Communications and Image Processing</u> , pp. 51-61.			
Jw	EEEE	"Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6,7,8,9, 1987, Volume 4 of 4, "Application of Quadrature Mirror Filtering to the Coding of Monochrome and Color Images", H. Gharavi and A. Tabatabai, pp. 2384-2387.			
Jw	FFFF	International Search report for Application No. GB 9518298.6, dated November 1995.			

RECEIVED

OCT 31 2002

Technology Center 2600

Examiner Signature		Date Considered	4/12/05
--------------------	--	-----------------	---------

*Examiner Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for Form 1449A/PTO (Modified)				Complete if Known	
INFORMATION DISCLOSURE				Application Number	09/704,991
STATEMENT BY APPLICANT				Filing Date	November 2, 2000
(use as many sheets as necessary)				First Named Inventor:	Edward L. Schwartz
<div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block;"> NOV 29 2002 </div>				Group Art Unit	2621
				Examiner Name	Unknown
				Attorney Docket Number	74451.P042X2
Sheet	1	of	6		

U.S. PATENT DOCUMENTS						
Exam. Initial ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code ²	Kind (If known)			
JW	A	6118902		Knowles	09/12/2000	
JW	B	5867602		Zandi et al.	02/02/1999	
JW	C	5638498		Tyler et al.	06/10/1997	
JW	D	5602589		Vishwanath et al.	02/11/1997	
JW	E	5563960		Shapiro	10/08/1996	
JW	F	5546477		Knowles et al.	08/13/1996	
JW	G	5537493		Wilkinson	07/16/1996	
JW	H	5534925		Zhong	07/09/1996	
JW	I	5497435		Berger	03/05/1996	
JW	J	5453945		Tucker et al.	09/26/1995	
JW	K	5412741		Shapiro	05/02/1995	
JW	L	5381145		Allen et al.	01/10/1995	
JW	M	5379355		Allen	01/03/1995	
JW	NI	5347479		Miyazaki	09/13/1994	
JW	N2	5335016		Nakagawa	08/02/1994	
JW	O	5241395		Chen	08/31/1993	
JW	P	5235434		Wober	05/10/1993	
JW	Q	5148498		Resnikoff et al.	09/1992	
JW	R	5109451		Aono et al.	04/28/1992	
JW	S	4999705		Puri	03/12/1991	
JW	T	4922544		Stansfield et al.	05/01/1990	

FOREIGN PATENT DOCUMENTS								
Exam. Initial ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (If known)				
JW	U	GB	2303031			06/25/1996		
JW	V	GB	2303030			06/25/1996		
JW	W	GB	2293734			07/09/1995		
JW	X	GB	2293733			07/09/1995		
JW	Y	UK	2285374	A		05/07/1995		
JW	Z	EP	0662741	A2		11/02/1994		
JW	AA	EP	0611051	A1		08/17/1994		

Examiner Signature	Date Considered	4/13/05
--------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

[illegible]

FOREIGN PATENT DOCUMENTS								
Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Office ³	Number ⁴ Code ⁵	Kind				
JW	DD	WO	9417492			08/04/1994		
JW	EE	EP	0593013	A2		04/20/1994		
JW	FF	WO	9310634			05/27/1993		
JW	GG	EP	0510933	A1		10/28/1992		
JW	HH	WO	9118361			11/28/1991		
JW	II	WO	9103902			03/21/1991		
JW	JJ	UK	2211691	A		05/07/1989		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

[illegible][illegible]

*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

OCT 29 2002

Sheet

4

of

6

Complete if Known

Application Number	09/704,991
Filing Date	November 2, 2000
First Named Inventor:	Edward L. Schwartz
Group Art Unit	2621
Examiner Name	Unknown
Attorney Docket Number	074451.P042X2

OTHER ART - NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
Jw	MM	Mutsumi Ohta, Mitsuharu Yano and Takao Nishitani, "Wavelet Picture Coding with Transform Coding Approach", 1/31/99, pp. 776-785.	
Jw	NN	French Search Report, FR9511024, 11/26/1996.	
Jw	OO	French Search Report, FR9511023, 11/26/1996.	
Jw	PP	Dutch Search Report, NO133082, 11/26/1996.	
Jw	QQ	Calderbank, et al., "Wavelet Transforms That Map Integers to Integers", August 1996.	
Jw	RR	Szu et al., "Image Wavelet Transforms Implemented by Discrete Wavelet Chips", July 1994, <u>Optimal Engineering</u> , Vol. 33, No. 7, pp. 2310-2325.	
Jw	SS	Villasenor, et al., "Filter Evaluation and Selection in Wavelet Image Compression", <u>IEEE</u> , 1994, pp. 351-360.	
Jw	TT	Denk, et al., "Architectures for Lattice Structure Based Orthonormal Discrete Wavelet Transforms", <u>IEEE</u> , 1994, pp. 259-270.	
Jw	UU	Shapiro, "Embedded Image Coding Using Zerotrees of Wavelet Coefficients", <u>IEEE Transactions on Signal Processing</u> , 12/93, No. 12, pp. 3445-3462.	
Jw	VV	Jie Chen, Shuichi Itoh, and Takeshi Nishitani, "Wavelet Picture Coding with Transform Coding Approach", 1/31/99, pp. 776-785.	
Jw	WW	Padmanabhan, et al., "Feedback-Based Orthogonal Digital Filters", <u>IEEE Transactions on Circuits and Systems</u> , 8/93, No. 8, pp. 512-525.	
Jw	XX	Said, et al., "Reversible Image Compression Via Multiresolution Representation and Predictive Coding", <u>SPIE</u> , Vol. 2094, 8/11/93, pp. 664-674.	

Examiner
SignatureDate
Considered

4/13/05

*Examiner Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

¹Unique citation designation number. Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washi

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

OCT 29 2002

Sheet

5

of

6

Complete if Known

Application Number	09/704,991
Filing Date	November 2, 2000
First Named Inventor:	Edward L. Schwartz
Group Art Unit	2621
Examiner Name	Unknown
Attorney Docket Number	074451.P042X

OTHER ART - NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
JW	YY	Said, et al., "Image Compression Using the Spatial-Orientation Tree", <u>IEEE</u> , 1993, pp. 279-282.	
JW	ZZ	Xiong, et al., "Joint Optimization of Scalar and Tree-Structured Quantization of Wavelet Image Decompositions", <u>IEEE</u> , 1/1/93, pp.891-895.	
JW	AAA	Howard et al., "Fast and Efficient Lossless Image Compression", <u>IEEE</u> , 1993, pp. 351-360.	
JW	BBB	Shapiro, J.M., "An Embedded Hierarchical Image Coder Using Zerotrees of Wavelet Coefficients", <u>IEEE</u> , 1993, pp. 214-223.	
JW	CCC	Cha Keon Cheong, Kyoharu Aizawa, Takahiro Saito and Mitsutoshi Hatori; "Subband Image Coding with Biorthogonal Wavelets"; 7/92; Pages 871-881	
JW	DDD	Antonini et al., "Image Coding Using Wavelet Transform", <u>IEEE Transactions on Image Processing</u> , Vol. 1, No. 2, April 1992, pp. 205-220.	
JW	EEE	Chui, et al., "Wavelets on a Bounded Interval", <u>Numerical Methods of Approximation Theory</u> , Vol. 9, 1992, pp. 53-75.	
JW	FFF	Shah et al., "A Chip Set for Lossless Image Compression", <u>IEEE Journal of Solid-State Circuits</u> , Vol. 26, No. 3, March 1991, pp. 237-244.	
JW	GGG	Langdon, Jr., Glen G., "Sunset: A Hardware-Oriented Algorithm for Lossless Compression of Gray Scale images", <u>SPIE Vol. 1444, Image Capture, Formatting, and Display</u> , 1991, p. 272-282.	
JW	HHH	A.S. Lewis and G. Knowles; "Image Compression Using the 2-D Wavelet Transform"; 11/15/90, Pages 244-250	
JW	III	Le Gall, et al., "Sub-band Coding of Digital Images Using Symmetric Short Kernel Filters and Arithmetic Coding Techniques", 1988, International Conference on Acoustics, Speech and Signal Processing, pp. 761-764.	

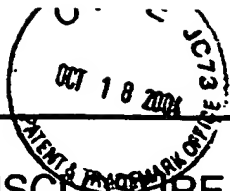
Examiner
SignatureDate
Considered

4/14/08

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

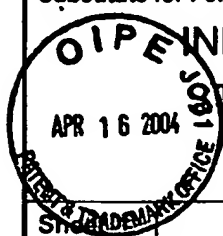


Substitute for Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known	
			Application Number	09/704,991
			Filing Date	November 1, 2000
			First Named Inventor:	Edward L. Schwartz
			Art Unit	2623
			Examiner Name	Wu, Jingge
Sheet	1	of 1	Attorney Docket Number	74451.P042X2
NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²	
JL		WU, ET AL., On Optimal Multi-resolution Scalar Quantization, Proceedings DCC 2002, Data Compression Conference, April 2-4, 2002, Snowbird, Utah, IEEE Computer Society, Los Alamitos, California, Washington, Brussels, Tokyo, pgs. 322-331.		

Examiner Signature		Date Considered	4/13/05
--------------------	--	-----------------	---------

*Examiner: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached.
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.
If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/704,991
Filing Date	11/01/2000
First Named Inventor:	Edward L. Schwartz
Art Unit	2623
Examiner Name	Jingge Wu
Attorney Docket Number	074451.P042X2

Sheet 1 of 8

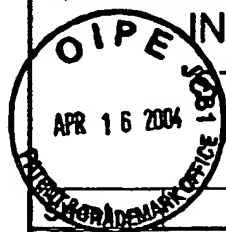
U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
JW		us	3,580,655	5/25/1971	Leith et al.	
JW		us	3,950,103	4/13/1976	Schmidt-Weinmar	
JW		us	4,136,954	1/30/1979	Jamieson	
JW		us	4,155,097	5/15/1979	Lux	
JW		us	4,190,861	2/26/1980	Lux	
JW		us	4,223,354	9/16/1980	Noble et al.	
JW		us	4,393,456	7/12/1983	Marshall, Jr.	
JW		us	4,437,087	3/13/1984	Petr	
JW		us	4,569,075	2/4/1986	Nussbaumer	
JW		us	4,599,567	7/8/1986	Goupillaud et al.	
JW		us	4,652,881	3/24/1987	Lewis	
JW		us	4,663,660	5/5/1987	Fedele et al.	
JW		us	4,674,125	6/16/1987	Carlson et al.	
JW		us	4,701,006	10/20/1987	Perlmutter	
JW		us	4,751,742	6/14/1988	Meeker	
JW		us	4,760,563	7/26/1988	Beylkin	
JW		us	4,785,348	11/15/1988	Fonsalas et al.	
JW		us	4,785,349	11/15/1988	Keith et al.	
JW		us	4,799,179	1/17/1989	Masson et al.	
JW		us	4,805,129	2/14/1989	David	
JW		us	4,815,023	3/21/1989	Arbeiter	
JW		us	4,817,182	3/28/1989	Adelson et al.	
JW		us	4,821,223	4/11/1989	David	
JW		us	4,827,336	5/2/1989	Acampora et al.	
JW		us	4,829,378	5/9/1989	Le Gall	
JW		us	4,837,517	6/6/1989	Barber	
JW		us	4,839,889	6/13/1989	Gockler	
JW		us	4,858,017	8/15/1989	Torbey	
JW		us	4,864,398	9/5/1989	Avis et al.	
JW		us	4,868,868	9/19/1989	Yazu et al.	
JW		us	4,881,075	11/14/1989	Weng	
JW		us	4,894,713	1/16/1990	Delogne et al.	
JW		us	4,897,717	1/30/1990	Hamilton et al.	
JW		us	4,899,147	2/6/1990	Schiavo et al.	
JW		us	4,904,073	2/27/1990	Lawton et al.	
JW		us	4,918,524	4/17/1990	Ansari et al.	
JW		us	4,922,544	5/1/1990	Stansfield et al.	
JW		us	4,929,223	5/29/1990	Walsh	
JW		us	4,929,946	5/29/1990	O'Brien et al.	
JW		us	4,936,665	6/26/1990	Whitney	
JW		us	4,973,961	11/27/1990	Chamzas et al.	
JW		us	4,974,187	11/27/1990	Lawton	
JW		us	4,982,283	1/1/1991	Acampora	

RECEIVED

APR 16 2004

Technology Center 2600



INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/704,991
Filing Date	11/01/2000
First Named Inventor:	Edward L. Schwartz
Art Unit	2623
Examiner Name	Jingge Wu
Attorney Docket Number	074451.P042X2

2

of

8

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
JW		us-	4,985,927	1/15/1991	Norwood et al.	
JW		us-	4,987,480	1/22/1991	Lippman et al.	
JW		us-	4,999,705	3/12/1991	Puri	
JW		us-	5,000,183	3/19/1991	Bonnefous	
JW		us-	5,001,764	3/19/1991	Wood et al.	
JW		us-	5,014,134	5/7/1991	Lawton et al.	
JW		us-	5,018,210	5/21/1991	Merryman et al.	
JW		us-	5,049,992	9/17/1991	Citta et al.	
JW		us-	5,049,993	9/17/1991	Le Gall et al.	
JW		us-	5,068,911	11/26/1991	Resnikoff et al.	
JW		us-	5,072,308	12/10/1991	Lin et al.	
JW		us-	5,073,964	12/17/1991	Resnikoff	
JW		us-	5,081,645	1/14/1992	Resnikoff et al.	
JW		us-	5,095,447	3/10/1992	Manns et al.	
JW		us-	5,097,261	3/17/1992	Langdon, Jr. et al.	
JW		us-	5,097,331	3/17/1992	Chen et al.	
JW		us-	5,101,280	3/31/1992	Moronaga et al.	
JW		us-	5,101,446	3/31/1992	Resnikoff et al.	
JW		us-	5,103,306	4/7/1992	Weiman et al.	
JW		us-	5,109,451	4/28/1992	Aono et al.	
JW		us-	5,121,191	6/9/1992	Cassereau et al.	
JW		us-	5,124,930	6/23/1992	Nicholas et al.	
JW		us-	5,128,757	7/7/1992	Citta et al.	
JW		us-	5,128,791	7/7/1992	Le Gall et al.	
JW		us-	5,148,498	9/15/1992	Resnikoff et al.	
JW		us-	5,152,953	10/6/1992	Ackermann	
JW		us-	5,156,943	10/20/1992	Whitney	
JW		us-	5,173,880	12/22/1992	Duren et al.	
JW		us-	5,182,645	1/26/1993	Breeuwer et al.	
JW		us-	5,223,926	6/29/1993	Stone, et al.	
JW		us-	5,235,434	8/10/1993	Wober	
JW		us-	5,241,395	8/31/1993	Chen	
JW		us-	5,262,958	11/16/1993	Chui et al.	
JW		us-	5,276,525	1/4/1994	Gharavi	
JW		us-	5,315,670	5/24/1994	Shapiro	
JW		us-	5,321,776	6/14/1994	Shapiro	
JW		us-	5,335,016	8/2/1994	Nakagawa	
JW		us-	5,347,479	9/13/1994	Miyazaki	
JW		us-	5,349,348	9/20/1994	Anderson et al.	
JW		us-	5,379,355	1/3/1995	Allen	
JW		us-	5,381,145	1/10/1995	Allen et al.	
JW		us-	5,384,869	1/24/1995	Wilkinson et al.	
JW		us-	5,412,741	5/2/1995	Shapiro	

RECEIVED

APR 16 2004

Technology Center 2600

4/1/05

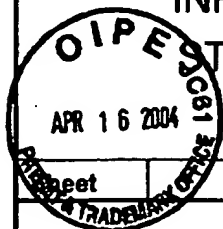
INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/704,991
Filing Date	11/01/2000
First Named Inventor:	Edward L. Schwartz
Art Unit	2623
Examiner Name	Jingge Wu
Attorney Docket Number	074451.P042X2



Sheet 3 of 8

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code² (if known)				
EW		US-	5,414,780	5/9/1995	Camahan	
EW		US-	5,416,604	5/16/1995	Park	
EW		US-	5,420,891	5/30/1995	Akansu	
EW		US-	5,453,945	9/26/1995	Tucker et al.	
EW		US-	5,455,874	10/3/1995	Ormsby et al.	
EW		US-	5,481,308	1/2/1996	Hartung et al.	
EW		US-	5,495,292	2/27/1996	Zhang et al.	
EW		US-	5,497,435	3/5/1996	Berger	
EW		US-	5,511,151	4/23/1996	Russell et al.	
EW		US-	5,534,925	7/9/1996	Zhong	
EW		US-	5,537,493	7/16/1996	Wilkinson	
EW		US-	5,541,594	7/30/1996	Huang et al.	
EW		US-	5,442,458	8/15/1995	Rabbani et al.	
EW		US-	5,546,477	8/13/1996	Knowles et al.	
EW		US-	5,563,960	10/8/1996	Shapiro	
EW		US-	5,566,089	10/15/1996	Hoogenboom	
EW		US-	5,602,589	2/11/1997	Vishwanath et al.	
EW		US-	5,631,977	5/20/1997	Koshi	
EW		US-	5,638,498	6/10/1997	Tyler et al.	
EW		US-	5,657,085	8/12/1997	Katto	
EW		US-	5,701,367	12/23/1997	Koshi et al.	
EW		US-	5,717,789	2/10/1998	Anderson, et al.	
EW		US-	5,754,793	5/19/1998	Eom et al.	
EW		US-	5,808,683	9/15/1998	Tong et al.	
EW		US-	5,809,176	9/15/1998	Yajima	
EW		US-	5,850,482	12/15/1998	Meany et al.	
EW		US-	5,867,602	2/2/1999	Zandi et al.	
EW		US-	5,880,856	3/9/1999	Ferriere	
EW		US-	5,966,465	10/12/1999	Keith et al.	
EW		US-	6,020,975	2/1/2000	Chen et al.	
EW		US-	6,026,198	2/15/2000	Okada	
EW		US-	6,088,062	7/11/2000	Kanou et al.	
EW		US-	6,101,279	8/8/2000	Nguyen et al.	
EW		US-	6,118,902	9/12/2000	Knowles	
EW		US-	6,121,970	9/19/2000	Guedalia	
EW		US-	6,128,413	10/3/2000	Benamara	
EW		US-	6,160,846	12/12/2000	Chiang	
EW		US-	6,201,897 B1	3/13/2001	Nixon	
EW		US-	6,229,929 B1	5/8/2001	Lynch et al.	
EW		US-	6,236,765 B1	5/22/2001	Archarya	
EW		US-	6,237,010 B1	5/22/2001	Hui et al.	
EW		US-	6,263,109 B1	7/17/2001	Ordentlich et al.	
EW		US-	6,263,120 B1	7/17/2001	Matsuoka	

RECEIVED

APR 16 2004

Technology Center 2600

(use as many sheets as necessary)

4

of

8

Application Number	09/704,991
Filing Date	11/01/2000
First Named Inventor:	Edward L. Schwartz
Art Unit	2623
Examiner Name	Jingge Wu
Attorney Docket Number	074451.P042X2

RECEIVED

APR 16 2004

Technology Center 2600

[illegible]

**Examiner
Signature**

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

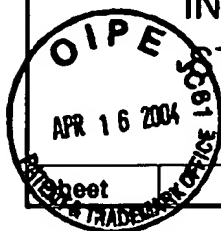
If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2

Substitute for Form 1449/PTO

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(use as many sheets as necessary)



Complete if Known

Application Number	09/704,991
Filing Date	11/01/2000
First Named Inventor:	Edward L. Schwartz
Art Unit	2623
Examiner Name	Jingge Wu
Attorney Docket Number	074451.P042X2

Sheet 5 of 8

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ^o
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
JW		EPO	0510933 A1		10/28/1992	Canon Kabushiki Kaisha		
JW		EPO	0593013 A2		4/20/1994	Kabushiki Kaisha Toshiba		
JW		EPO	0611051 A1		8/17/1994	Canon Kabushiki Kaisha		
JW		EPO	0622741 A2		11/2/1994	Klics, Ltd.		
JW		EPO	0967556 A2		12/29/1999	Hewlett-Packard Co.		
JW		EPO	1035511 A2		9/13/2000	Canon Kabushiki Kaisha		
JW		EPO	1164781 A1		12/19/2001	Matsushita Electric Ind. Co., Ltd		
JW		EPO	701375 A2		3/13/1996	Xerox Corporation		
JW		JP	06-245077		9/2/1994	Nec Corp.		
JW		JP	406038193 A		7/17/1992	Casio Computer Co. Ltd.		
JW		JP	6-350989		12/22/1994	Fuji Photo Film Co. Ltd.		
JW		JP	7-79350		3/20/1995	Fuji Photo Film Co. Ltd.		
JW		PCT WO	00/49571		8/24/2000	Digital Accelerator Corp.		
JW		PCT WO	01/16764 A1		3/8/2001	Rtimage Inc.		
JW		PCT WO	88/10049		12/15/1988	Eastman Kodak Co.		
JW		PCT WO	91/03902		3/21/1991	Aware, Inc.		
JW		PCT WO	91/18361		11/28/1991	Yale University		
JW		PCT WO	93/10634		5/27/1993	General Electric Co.		
JW		PCT WO	94/17492		8/4/1994	David Samoff Research Ctr., Inc.		
JW		PCT WO	94/23385		10/13/1994	Lewis, Adrian		
JW		PCT WO	95/19683		7/20/1995	Houston Advanced Research Ctr.		
JW		PCT WO	96/09718		3/28/1996	Houston Advanced Research Ctr.		
JW		UK GB	2 211 691 A		7/5/1989	Hitachi Ltd.		
JW		UK GB	2 284 121 A		5/24/1995	State of Israel- Ministry of Defence		
JW		UK GB	2 285 374 A		7/5/1995	Ricoh Company Ltd.		
JW		UK GB	2 293 733 A		4/3/1996	Ricoh Company Ltd.		
JW		UK GB	2 293 734 A		4/3/1996	Ricoh Company Ltd.		
JW		UK GB	2 303 030 A		2/5/1997	Ricoh Company Ltd.		
JW		UK GB	2 303 031 A		2/5/1997	Ricoh Company Ltd.		
JW		UK GB	2 341 035 A		3/1/2000	Ricoh Company Ltd.		

RECEIVED

APR 16 2004

Technology Center 2600

Examiner Signature

Date Considered

*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). *See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *Applicant is to place a check mark here if English language translation is attached.

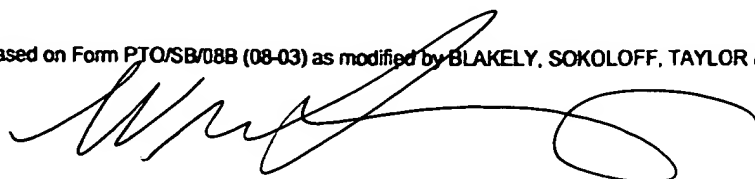
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-8199 (1-800-786-8199) and select option 2.

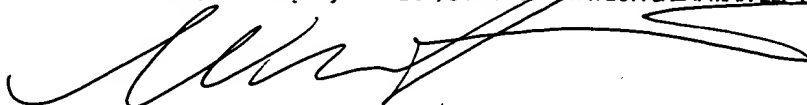
Based on Form PTO/SB/088 (08-03) as modified by BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP on 09/10/03.

Substitute for Form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/704,991
				Filing Date	11/01/2000
				First Named Inventor:	Edward L. Schwartz
				Art Unit	2623
				Examiner Name	Jingge Wu
Sheet	6	of	8	Attorney Docket Number	074451.P042X2
NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
JW		ANTONINI, et al., "Image Coding Using Wavelet Transform", <u>IEEE Transactions on Image Processing</u> , Vol 1, No. 2, April 1992, pp. 205-220.			
JW		BLUMBERG, et al., "Visual Realism and Interactivity for the Internet", <u>IEEE</u> , 1997, pp. 269-273.			
JW		BOLIEK, et al., "Decoding compression with reversible embedded wavelets (CREW) codestreams", <u>Journal of Electronic Imaging</u> , July 1998, vol. 7 (3), pp. 402-409.			
JW		BOLIEK, et al., "JPEG 2000 for Efficient Imaging in a Client/Server Environment", <u>Proceeding of the PIE, SPIE, Bellingham, VA, US</u> , Vol. 4472, July 31, 2001, pp. 212-223, XP008010308.			
JW		BOLIEK, et al., "JPEG 2000 Next Generation Image Compression System", <u>IEEE 0-7803-6297</u> , 45-48			
JW		CALDERBANK, et al., "Wavelet Transforms That Map Integers to Integers", August 1996.			
JW		CAREY, et al: "Regularity-Preserving Image Interpolation", <u>IEEE Transactions on Image Processing</u> , Vol. 8., No. 9, September 1999, pgs. 1293-1297, XP002246254.			
JW		CARRATO, et al: "A Simple Edge-Sensitive Image Interpolation Filter", <u>Proceedings of the International Conference on Image Processing (ICIP) Lausanne, Sept. 16-19, 1996</u> , New York, <u>IEEE, US</u> , vol. 1, pgs. 711-714, XP010202493.			
JW		CHEN, et al., "Wavelet Pyramid Image Coding with Predictable and Controllable Subjective Picture Quality", <u>IEICE Trans. Fundamentals</u> , Vol. E76-A., No. 9, September 1993, pp. 1458-1468.			
JW		CHEONG, et al., "Subband Image Coding with Biorthogonal Wavelets", <u>IEICE Trans. Fundamentals</u> , Vol. E75-A., No. 7, July 1992, pp. 871-881.			
JW		CHRYSAFIS, et al., "An Algorithm for Low Memory Wavelet Image Compression", <u>IEEE 0-7803-5467-2/99</u> , pg. 354-358.			
JW		CHRYSAFIS, et al., "Line Based Reduced Memory, Wavelet Image Compression," <u>Data Compression Conference, 1998, DCC '98, Proceedings Snowbird, UT, March 1998</u> , pgs. 398-407.			
JW		CHUI, et al., "Wavelets on a Bounded Interval", <u>Numerical Methods of Approximation Theory</u> , Vol. 9, 1992, pg. 53-75.			
JW		CROCHIERE, et al., "Digital Coding of Speech in Sub-bands", 1976, <u>American Telephone and Telegraph Company, The Bell System Technical Journal</u> , Vol. 55, No. 8, October 1976, p. 1069-1085.			
JW		DENK, et al., "Architectures for Lattice Structure Based Orthonormal Discrete Wavelet Transforms", <u>IEEE</u> , 1994, pp. 259-270.			
JW		DESHPANDE, et al., "HTTP Streaming of JPEG2000 Images", <u>IEEE</u> , 2001, pp.15-19.			
JW		Dutch Search Report, 133082, 11/26/96.			
JW		ESTEBAN, et al., "1977 IEEE International Conference on Acoustics, Speech & Signal Processing", "Application of Quadrature Mirror Filters to Split Band Voice Coding Schemes", p. 191-195.			
JW		French Search Report, FR9511023, 11/26/96.			
JW		French Search Report, FR9511024, 11/26/96.			
JW		German Search Report, Dated March 21, 1997, 3 pages.			
JW		GHARAVI, et al., "Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6, 7, 8, 9, 1987, Volume 4 of 4, "Application of Quadrature Mirror Filtering to the Coding of Monochrome and Color Images", p. 2384-2387.			

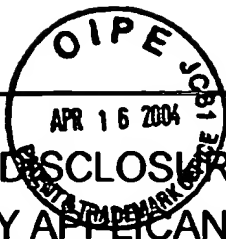


4/15/05

Substitute for Form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/704,991
				Filing Date	11/01/2000
				First Named Inventor:	Edward L. Schwaiger
				Art Unit	2623
				Examiner Name	Jingge Wu
Sheet	7	of	8	Attorney Docket Number	074451.P042X2
RECEIVED APR 16 2004					
NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
JW		GHARAVI, et al., "Sub-band Coding of Digital Images Using Two-Dimensional Quadrature Mirror Filtering", SPIE Vol. 707 Visual Communications and Image Processing, 1986, p. 51-61.			
JW		GORDON, BENJAMIN M., et al., "A 1.2 mW Video-Rate 2-D Color Subband Decoder," IEEE Journal of Solid-State Circuits, IEEE Inc. New York, Vol. 30, No. 12, Dec. 1, 1995, pgs. 1510-1516.			
JW		HAUF, et al., "The FlashPix™ Image File Format", The Fourth Color Imaging Conference: Color Science, Systems and Application, 1996, pp. 234-238.			
JW		HOWARD, et al., "Fast and Efficient Lossless Image Compression", IEEE, 1993, pp. 351-360.			
JW		Information Technology - JPEG 2000 Image Coding System - Part 1: Core Coding System, ISO/IEC 15444-1, 12/15/2000, pg. 5, 14, 22.			
JW		International Search Report for Application No.: GB 9518298.6, dated 8. November 1995.			
JW		JPEG 2000 Part 1 Final Committee Draft Version 1.0, Image Compression Standard described in ISO/IEC 1/SC 29/WG 1 N1646, 16 March 2000.			
JW		KOMATSU, et al., "Reversible Subband Coding of Images", SPIE Vol. 2501, pp. 676-648..			
JW		LANGDON, JR., "Sunset: A Hardware-Oriented Algorithm for Lossless Compression of Gray Scale Images", SPIE Vol. 1444, Image Capture, Formatting, and Display, 1991, pp. 272-282.			
JW		LE GALL, et al., "Sub-band coding of Digital Images Using Symmetric Short Kernal Filters and Arithmetic Coding Techniques", 1988, International Conference on Acoustics, Speech and Signal Processing, pp. 761-764.			
JW		LEWIS, et al., "Image Compression Using the 2-D Wavelet Transform", IEEE Transactions on Image Processing, Vol. 1, No. 2, April 1992, pp. 244-250.			
JW		LUX, P., "A Novel Set of Closed Orthogonal Functions for Picture Coding", 1977, pp. 267-274.			
JW		MARCELLIN, et al., "An Overview of JPEG-2000", Proceedings. DCC 2000 Snowbird, UT, USA, March 28-30, 2000, pp. 523-541, XP010377392.			
JW		MENG, TERESA H., "A Wireless Portable Video-on-Demand System," VLSI Design, 1998, Proceedings Eleventh International Conference on Chennai, India 407, Jan. 1998, California, pgs. 4-9.			
JW		OHTA, et al., "Wavelet Picture Coding with Transform Coding Approach", July 1992, No. 7, pp. 776-784.			
JW		PADMANABHAN, et al., "Feedback-Based Orthogonal Digital Filters", IEEE Transactions on Circuits and Systems, 8/93, No. 8, pp. 512-525.			
JW		POLLARA et al., "Rate-distortion Efficiency of Subband Coding with Integer Coefficient Filters", 7/1994, pg. 419, Information Theory, 1994, IEEE			
JW		REEVES, et al: "Multiscale-Based Image Enhancement", Electrical and Computer Engineering, 1997. Engineering Innovation: Voyage of Discovery. IEEE 1997 Canadian Conference on St. Johns, NFLD., Canada May 25-28, 1997, New York, NY. (pgs. 500-503), XP010235053			
JW		REUSENS, "New Results in Subband/Wavelet Image Coding", 5/1993, pg. 381-385.			
JW		SAID, et al., "Image Compression Using the Spatial-Orientation Tree", IEEE, 1993, pp. 279-282.			
JW		SAID, et al., "Reversible Image Compression Via Multiresolution representation and Predictive Coding", 8/11/93, pp. 664-674.			



4/15/05



Substitute for Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	09/704,991		
		Filing Date	11/01/2000		
		First Named Inventor:	Edward L. Schwartz		
		Art Unit	2623		
		Examiner Name	Jingge Wu		
Sheet	8	of	8	Attorney Docket Number	074451.P042K2

RECEIVED
APR 16 2004
Technology Center 2600

NON PATENT LITERATURE DOCUMENTS

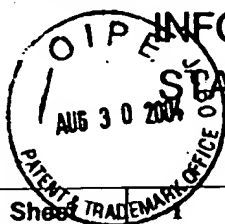
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
JW		SHAH, et al., "A Chip Set for Lossless Image Compression", <u>IEEE Journal of Solid-State Circuits</u> , Vol. 26, No. 3, March 1991, pp. 237-244.	
JW		SHAPIRO, J. M., "An Embedded Hierarchical Image Coder Using Zerotrees of Wavelet Coefficients", <u>IEEE</u> , 1993, pp. 214-223.	
JW		SHAPIRO, J. M., "Embedded Image Coding Using Zerotrees of Wavelet Coefficients", <u>IEEE Transactions on Signal Processing</u> , 12/93, No. 12, pp. 3445-3462.	
JW		SMITH, et al., "Exact Reconstruction Techniques for Tree-Structured Subband Coders", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol ASSP-34, No. 3, June 1986, pp. 434-441.	
JW		STOFFEL, et al: "A Survey Of Electronic Techniques For Pictorial Image Reproduction," <u>IEEE Transactions On Communications</u> , vol. COM-29, no. 12, December 1981, pp. 1898-1925, XP000560531 IEEE, New York (US).	
JW		SZU, et al., "Image Wavelet Transforms Implemented by Discrete Wavelet Chips", <u>Optical Engineering</u> , July 1994, Vol. 33, No. 7, pp.2310-2325.	
JW		VETTERLI, Martin, "Filter Banks Allowing Perfect Reconstruction", <u>Signal Processing</u> 10 (1986), pp. 219-244.	
JW		VETTERLI, Martin, "Multi-Dimensional Sub-band Coding: Some Theory and Algorithms", <u>Signal Processing</u> 6 (1984) pp. 97-112.	
JW		VILLASENOR, et al., "Filter Evaluation and Selection in Wavelet Image Compression", <u>IEEE</u> , 1994, pp. 351-360.	
JW		WESTERNICK, et al., "Proceedings: ICASSP 87", 1987 International Conference on Acoustics, Speech, and Signal Processing, April 6, 7, 8, 9, 1987, Volume 3 of 4, "Sub-band coding of Images Using Predictive Vector Quantization", p. 1378-1381.	
JW		WOODS, "Subband Image Coding", 1991, pages 101-108, 163-167, and 180-189.	
JW		WOODS, et al., "Subband Coding of Images", <u>IEEE Transactions on Acoustics, Speech, and Signal Processing</u> , Vol. 1 ASSP-34, No. 5, October 1986, pp. 1278-1288.	
JW		WOODS, et al., "Sub-band coding of Images", <u>Proceedings ICASSP 86</u> , Tokyo, Japan, April 1986, p. 1005-1008.	
JW		WU, et al., "New Compression Paradigms in JPEG2000", <u>Applications of Digital Image Processing XXIII</u> , San Diego, CA USA, July 31-Aug 3, 2000, vol. 4115, pp. 418-429, XP008013391, <u>Proceedings of the SPIE - The International Society for Optical Engineering</u> , 2000, SPIE-Int. Soc. Opt. Eng., USA.	
JW		XIONG, et al., "Joint Optimization of Scalar and Tree-structured Quantization of Wavelet Image Decompositions", <u>Opt</u> 11/93, pp. 891-895.	

Examiner Signature		Date Considered	4/15/05
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1

of 2

Complete if Known

Application Number	09/704,991
Filing Date	November 1, 2000
First Named Inventor:	Edward L. Schwartz
Art Unit	2623
Examiner Name	Wu, Jingge
Attorney Docket Number	74451.P042X2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
JL		US-	2001/0003544 A1	06-14-2001	Kajiwara et al.	
JL		US-	5,303,200	04-12-1994	Elrod et al.	
JL		US-	5,600,373	02-04-1997	Chui et al.	
JL		US-	5,999,634	12-07-1999	Abbott et al.	
JL		US-	6,005,901	12-21-1999	Linz	
JL		US-	6,031,940	02-29-2000	Chui et al.	
JL		US-	6,088,395	07-11-2000	Wang et al.	
JL		US-	6,266,450 B1	07-24-2001	Yip et al.	
JL		US-	6,275,531 B1	08-14-2001	Li	
JL		US-	6,332,043 B1	12-18-2001	Ogata	
JL		US-	6,442,302 B2	08-27-2002	Klassen	
JL		US-	6,486,981 B1	11-26-2002	Shimura et al.	
JL		US-	6,492,916 B1	12-10-2002	Schwartz et al.	
JL		US-	6,549,673 B1	04-15-2003	Ammicht et al.	
JL		US-	6,606,416 B1	08-12-2003	Yip et al.	
JL		US-	6,658,159 B1	12-02-2003	Taubman	

RECEIVED

OCT 04 2004

Technology Center 2600

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ^o
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				

Examiner
Signature

Date Considered

*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Based on Form PTO/SB/08A (08-03) as modified by BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP on 09/10/03.